

CHAPTER 5 SPECIAL INSPECTIONS AND TESTING SERVICES

SIFC-501 PROCEDURAL REQUIREMENTS

SIFC-501.1 General. The **Owner** shall be responsible for retaining an independent **Special inspections engineer of record (SIER)** and an **inspection and testing agency** to provide special inspections, materials testing, and related services, including inspection and testing agency supervision, as described in the County-approved Statement of Special Inspections and this SIFC-2000. Under no circumstances shall the **GC** or any of the subcontractors be permitted to provide special inspections and testing services.

The **SIER** shall be an **RDP** retained by the **Owner**, independent of the contractors performing the work subject to special inspections, and approved by **FCCSS** to perform special inspections. The **SIER** is responsible for the work of the inspection and testing agency. The **inspection and testing agency** shall be an established and recognized agency or agencies, retained by the **Owner**, independent of the contractors performing the work subject to special inspections, and approved by **FCCSS** to perform special inspections and materials testing required by the VUSBC, IBC and this SIFC-2000. To be approved by **FCCSS**, an inspection and testing agency shall meet the requirements of ASTM E 329 and shall be accredited.

The **GC** shall coordinate the scheduling of inspections. The inspection and testing agency personnel required on-site shall be in numbers sufficient to perform all required tasks.

SIFC-501.2 Review and approval. As part of the SSI submitted for County approval and permit issuance, the **Owner** shall furnish the County with the names of the **SIER** and the inspection and testing agency retained to provide special inspections and testing services. The SSI is reviewed and approved by the **BPRD** and **FCCSS** (see SIFC-304.2 and SIFC-404.4).

After County review and approval of the SSI, the **SIER** shall submit to **FCCSS** one copy of resumes of all inspection and testing agency personnel assigned to the project, inspectors' certifications and accreditation certificates for laboratory facilities. The personnel and laboratories shall meet the requirements of SIFC-503 and SIFC-504 for **FCCSS** approval.

SIFC-501.3 Changes in construction team. In the event that the **AR, SER, GER, GC, SIER**, or the organizations or individuals contracted for special inspections or testing services are changed during the course of the work, the **Owner** shall notify **FCCSS** immediately. The **Owner** shall provide a written explanation for such change; shall identify and obtain County approval for the replacement organization or a replacement individual; and shall schedule a new meeting with **FCCSS** and the replacement organization or the replacement individual. The **Owner** shall ensure that there is a timely transfer of information and responsibility to the replacement party.

Change of **AR** or **SER** requires approval by **BPRD**. Change of **GER** requires approval by **EFRD** and by **FCCSS**. Change of **GC** requires notification to **BPRD** and **FCCSS**, and if the **GC** is named on the building permit, then a new building permit is required. Change of **SIER** requires approval by **FCCSS**. In the event the inspection and testing agency has significant changes in management, ownership, personnel certifications or laboratory accreditation, re-approval by **FCCSS** is required.

SIFC-502 ROLES AND RESPONSIBILITIES

SIFC-502.1 Special inspections. The **SIER** shall provide and certify special inspections of building components and testing of construction materials where such inspections and testing are required by the VUSBC, IBC, the SSI and this SIFC-2000.

SIFC-502.2 Approved documents. Prior to conducting special inspections and materials testing, the **SIER** shall be responsible for verification of the following:

- **Building permit.** A building permit for the particular construction has been issued and a copy of the building permit is available at the job site.
- **Approved construction documents.** A set of original County-approved construction documents is available at the job site.
- **Approved fabrication and erection documents.** County-approved fabrication and erection documents, which also bear the **SER** review/approval stamp, are available at the job site. Other approved fabrication and erection documents which do not require County approval but which bear the **SER** review/approval stamp are available at the job site and a record copy of such documents received by **FCCSS** where required by this SIFC-2000.
- **Document revisions.** All revisions to County-approved construction documents, or other fabrication and erection documents, such as field change orders in response to requests for information, are in writing and have been approved, signed and sealed by the **AR**, **SER** and/or **GER**, and the County, as appropriate. If such revisions do not bear the County stamp of approval, the **SIER** shall confirm with **FCCSS** whether the revisions are authorized or whether formal re-approval of revised documents by **BPRD**, **EFRD** or **FCCSS** is required. It shall be the responsibility of the **AR**, **SER**, and/or **GER**, as appropriate, to submit written revisions to **FCCSS** within seven working days of approval.

SIFC-502.3 Deviations. The **SIER** and the **SIER's** representatives/field technicians shall not suggest, direct or authorize the fabricator, erector or contractor to deviate from the contract documents, County-approved construction documents, or County-approved fabrication and erection documents, without the express written approval of the **AR**, **SER**, **GER** and **FCCSS**, as appropriate.

SIFC-502.4 Special inspection reports. The **SIER** shall report the results of testing and inspections, both approvals and rejections, to **FCCSS** according to the following procedures:

- **Seal and signature.** Each report shall bear a signature and seal of the **SIER** and shall include the correct building permit number and project address. Reports without project identification shall be rejected.
- **Submissions.** Both approval and rejection reports shall always be submitted to **FCCSS**, the **Owner**, and the **GC**, and shall be submitted to the **AR**, **SER**, and/or **GER** as appropriate. Deficiencies shall be reported to the **GC** for correction. With the exception of situations where a code violation or safety hazard is discovered (see SIFC-502.5 and SIFC-502.6), all inspection and test reports shall be submitted to **FCCSS** within seven working days of the inspection or test performed.
- **Compliance.** Unless deficiencies are discovered or code violations are revealed during the conduct of special inspection and testing services, special inspection and testing reports shall indicate that the specified work has been inspected and found to be in compliance with County-approved documents.

- **Deficiencies.** Deficiency reports shall contain the details describing the nature and specific location of the deficiency and include a description of the action recommended by the **AR**, **SER** and/or **GER**, as appropriate, to correct it.
- **Correction of deficiencies.** At the completion of a project, all recorded problems or deficiencies shall be documented as having been corrected and approved by the **AR**, **SER** and/or **GER**, as appropriate.
- **Completion letters.** Upon completion of special inspections and testing for a particular construction discipline, such as “structural steel”, the **SIER** shall, after review and approval by the appropriate **RDPs**, submit a completion letter to **FCCSS**.
- **Final report of special inspections.** Upon completion of all special inspections and testing for the scope of special inspections applicable to the construction project, the **SIER** shall, after review and approval by the appropriate **RDPs**, submit a final report of special inspections to **FCCSS** for review and approval. **FCCSS** approval is required prior to final building inspection approval.

SIFC-502.5 Code violations. In the event that the **SIER** and/or **SIER** personnel observe a condition during the conduct of special inspection and/or testing services that constitutes a violation of the VUSBC or the Code of the County of Fairfax, the **SIER** shall immediately notify the appropriate **RDPs** of record and **FCCSS** for resolution, followed with a written report submitted to **FCCSS** within seven working days.

SIFC-502.6 Job site safety violations. In the event that the **SIER** and/or **SIER** personnel observe a condition that poses an immediate or serious safety hazard to job site workers and/or the general public, the **SIER** shall immediately notify the **GC** superintendent and **FCCSS** for resolution.

SIFC-503 PERSONNEL QUALIFICATIONS

SIFC-503.1 Direct supervision. The inspection and testing agency personnel assigned to conduct special inspections in Fairfax County shall work under the supervision of an approved **RDP** with demonstrated proficiency in the construction discipline to be evaluated.

SIFC-503.2 Certification. Except for individuals who are **RDPs**, inspection and testing agency field inspection personnel shall be certified by examination through WACEL, ACI, AWS, ASNT, NICET or other organizations whose programs are recognized by the County. Inspection and testing agency personnel shall be reviewed and approved by **FCCSS** on a case by case basis. The inspection and testing agency personnel shall perform only those services in which they have demonstrated competency through an approved certification or registration program. Different levels or types of special inspections require different levels or types of expertise by the inspector, and the two shall match. Tests or inspections performed by unqualified or non-approved inspection and testing agency personnel shall be automatically rejected, and work shall not proceed until reinspections are performed and approved.

SIFC-503.3 Unusual functions. In the event there is no certification program applicable to a specific function, the **SIER** shall submit a signed statement attesting to the competency of inspection and testing agency personnel and identifying the basis upon which such statement is made.

SIFC-504 LABORATORY ACCEPTANCE STANDARDS

All laboratory facilities performing special inspection and testing services in the County shall meet the requirements of ASTM E 329, ASTM D 3740, and ASTM C 1077 as applicable and shall be individually accredited by organizations such as WACEL, A2LA, NIST, NVLAP or other organizations whose programs are recognized by the County. Where inspection and testing agencies have multiple offices and laboratory facilities performing special inspection and testing services in the County, each laboratory shall be individually accredited and meet the requirements of ASTM E 329, ASTM D 3740, and ASTM C 1077 as applicable. Laboratories shall be reviewed and approved by **FCCSS** on a case by case basis and shall perform only those tests and analyses for which accreditation has been obtained. The **SIER** shall approve on-site laboratories provided the on-site laboratory demonstrates that it follows a quality systems manual, equipment calibration program and technician certification program of an accredited laboratory.